

sparrows (*Passer domesticus* and *P. montanus*) co-exist at Lammasinghi and it is desirable to study their ecology.

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7. FOOD AND FEEDING HABITS OF THE TOAD, *BUFO MELANOSTICTUS* SCHNEIDER (AMPHIBIA : BUFONIDAE)

In India practically no attempt has been made to study the feeding habits of the common toads, excepting for a stray record of Rai *et al.* (1969) of the adults of the white grub, *Holotrichia consanguinea* Blanch. being fed upon by the common Indian toad, *Bufo melanostictus*. Prasad (1961), while reviewing the natural enemies of the sugarcane white grubs, indicated the beneficial effect of introduction of the Surinam toad, *Bufo marinus*, into Puerto Rico and Hawaii in the control of scarabaeids.

The present study involved examination of the stomach contents of 362 individuals of the common Indian toad, *Bufo melanostictus* Schneider carried over a period of 14 months during 1968-1970. The toads were collected during the evenings almost every fortnight during the period in various agricultural fields and near lamp posts around Dharwar, Mysore State. The toads thus collected the previous evening were sexed and dissected, the stomachs were cut out and preserved separately in 10 per cent formaldehyde for future examination of the contents. The stomachs thus preserved were slit open, the contents were taken out and identified taking care to see that the number of individual insects and other animals was correctly recorded. The data are summarised groupwise in Table 1.

RESULTS AND DISCUSSION

Toads in general are well known to feed on different groups of animals of which insects constitute the major bulk. In the present study also insects were recovered from stomachs and constituted 99 per cent of the total number of various animals consumed. Two other

TABLE 1
ANALYSIS OF THE STOMACH CONTENTS OF *Bufo melanostictus*

Animal group	No. of stomachs containing the animals	Per cent	No. of individuals	Per cent	Remarks
I. INSECTA					
1. Order Coleoptera					
Family Carabidae	58		106		
" Chrysomelidae	11		14		
" Cicindelidae	3		5		
" Curculionidae	17		18		
" Coccinellidae	2		2		
" Elateridae	13		33		
" Scarabaeidae	79		196		
" Tenebrionidae	82		345		
" Others (including grubs and pupae)	19		38		
	284	78	757	26	
2. Order Hymenoptera					
Family Apidae	3		11		
" Formicidae	137		1293		
" Vespidae	6		19		
" Others	3		3		
	149	41	1326	46	

TABLE 1—(Continued)

Animal group	No. of stomachs containing the animals	Per cent	No. of individuals	Per cent	Remarks
3. Order Diptera					
Family Syrphidae	21		93		
" Muscidae	3		4		
Others (including maggots, Pupae and eggs)	16		216		207 maggots were recovered from 12 stomachs.
	40	11	313	11	
4. Order Lepidoptera					
Hairy caterpillars	7		19		
Other caterpillars	17		62		
	24	7	81	3	
5. Order Dictyoptera					
Family Blattidae	52		74		43 of these were <i>Periplaneta americana</i> .
" Mantidae	1		1		
	53	15	75	3	
6. Order Orthoptera					
Family Acrididae	3		3		
" Gryllidae	10		13		
" Gryllotalpidae	22		45		
	35	10	61	2	

7. Order Dermaptera	..	46	13	105	4	
8. Order Heteroptera	..	8		55		Mostly <i>Nezara viridula</i>
Family Lygaeidae	..	26		46		
" Pentatomidae	..	3		3		
" Reduviidae	..	5		7		
Others	..					
		42	12	111	4	
9. Order Homoptera	..	1		1		
Family Cicadellidae	..	1		1		
" Membracidae	..					
		2		2		Less than 1
II. ARACHNIDA						
10. Order Araneae (Spiders)	..	5		9		
11. Order Scorpionida (Scorpions)	..	1		1		
		6		10		Less than 1
III. MYRIAPODA						
12. Order Scolopendromorpha (Centipedes)	..	2		3		
13. Order Polydesmida (Millipedes)	..	4		11		Mostly <i>Streptogonopus jerdoni</i> (Pocock).
		6		14		Less than 1
IV. GASTROPODA						
14. Order Euthyneura (Snails)	..	2		10		
-do- (Slugs)	..	3		5		
		5		15		Less than 1

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